

upper extremity of these elderly patients with very fair skin. The preferred treatment was physical destruction of the lesions instead of noninvasive topical therapy.

# PSS23

## THE PROFILE OF SOLAR EXPOSITION AND USE OF SUNSCREENING AGENTS USE OF PATIENTS FROM SÃO PAULO CITY WITH ACTINIC KERATOSIS (AK)

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**OBJECTIVES:** Actinic keratoses are common dysplastic epidermal lesions which occur in pale-skinned individuals who are chronically exposed to intense sunlight. It is one of the most commonly treated skin conditions. The objective of this research is to describe the Brazilian profile of solar exposition and the sunscreening agents use in patients with AK. **METHODS:** A two months health survey was performed in São Paulo city in which 10 dermatologists registered the profile of solar exposition and the sunscreening agents use of a sample of patients with AK. **RESULTS:** Of a total of 4961 patients, 269 (5,4%) patients were diagnosed with AK of which 58% were females. The mean age of the patients was 65 years old. Before AK diagnosis 91% of the patients exposed themselves to the sun mainly for leisure during weekends and only 26% used sunscreening agents. After AK diagnosis 43% of the patients still had the habit of solar exposition, however 78% uses sunscreening agents. The sun protection factor (SPF) most used before of the diagnosis was SPF15 (44%) and SPF30 (38%), changing to SPF30 (40%) and SPF60 (33%) after the diagnosis. **CONCLUSIONS:** This data suggest that the São Paulo city population with actinic keratosis presents the habit of leisure solar exposition with insufficient use of sunscreening agents. The use of sunscreening agents increases after the diagnosis of the disease.

## URINARY/KIDNEY DISORDERS – Clinical Outcomes Studies

### PUK1

#### COMPARATIVE EFFICACY AND SAFETY OF TREATMENTS FOR THE MANAGEMENT OF OVERACTIVE BLADDER: A SYSTEMATIC LITERATURE REVIEW AND MIXED TREATMENT COMPARISON

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**OBJECTIVES:** Overactive bladder (OAB) treatment guidelines recommend antimuscarinics as first-line pharmacologic therapy. Mirabegron is a first-in-class beta-3 adrenoceptor agonist which is licensed for the treatment of OAB and has shown to be well tolerated and effective in the treatment of OAB symptoms. A systematic literature review and Mixed Treatment Comparisons (MTC) were performed to assess the efficacy and tolerability of OAB medications, and more specifically mirabegron 50 mg vs. antimuscarinics in patients with OAB. **METHODS:** This review included randomised controlled trials (RCTs) estimating changes in symptoms (micturition frequency, incontinence and urgency incontinence episodes) and probabilities of the most frequently reported adverse events associated with current OAB medications. Literature searches were performed on published peer reviewed articles from 2000 to 2012. The following drugs were considered in addition to mirabegron: tolterodine immediate release (IR) and extended release (ER), oxybutynin IR/ER, trospium, solifenacin, and fesoterodine. A Bayesian MTC was performed, with tolterodine ER 4 mg as reference comparator. **RESULTS:** 40 RCTs involving 26,033 patients were included. The deviance information criteria was minimised with the random effects model for dry mouth and with fixed effect model for other outcomes. The mixed treatment comparison showed that mirabegron 50mg had similar efficacy to most antimuscarinics in terms of micturition frequency, incontinence episodes and urgency urinary incontinence episodes. Mirabegron 50mg also had a probability of dry mouth similar to placebo, and significantly lower than all included antimuscarinics. **CONCLUSIONS:** Improvements of OAB symptoms were demonstrated for all reviewed OAB treatments versus placebo. Mirabegron 50mg had similar efficacy to most antimuscarinics, and the lowest incidence of dry mouth, which is one of the main causes of discontinuation of antimuscarinics.

## URINARY/KIDNEY DISORDERS – Cost Studies

### PUK2

#### COST ANALYSIS OF KIDNEY TRASPLANTATION WITH DIFFERENT TRATMENT ALTERNATIVES AT DIFFERENT STAGES WITHIN THE MEXICAN PUBLIC HEALTH CARE SYSTEM

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**OBJECTIVES:** To analyze the cost of treatment alternatives at different stages along kidney transplantation. **METHODS:** A Cost Analysis was developed to compare different treatment pathways alternatives for patients with kidney transplantation maintenance. Direct and Indirect costs were included. Four stages were identified for the cost analysis (induction, initial, maintenance and rejection). Each stage has different treatment alternatives, a combination of them were compared including medical services and drug costs. The perspective

of the analysis was institutional. The resource use was identified by expert panel of clinicians, and medical literature. Cost valuation uses unitary cost list of the Mexican Institute of Social Security (IMSS). Drug costs are those from public tenders 2012. Initially, two scenarios were compared; the first was performed using the most common treatments available in the Institutions, the second scenario includes other alternatives. The first scenario alternatives were: Anti-thymocyte globulin, a combination of Tacrolimus/Mycophenolate mofetil (MMF) and Cyclosporin/MMF for the induction, initial, and maintenance phase respectively. The second scenario were: Basiliximab, Cyclosporin/Everolimus and Cyclosporin/Mycophenolate Sodium (MPS). Hospital services, rejection treatment and diagnostic resources were the same for both scenarios. **RESULTS:** The costs for the different scenarios were lower in the second option than for the first case. In the first scenario the total cost per patient at all stages of kidney transplantation was US\$40,210.28; with the second option was US\$39,414.30; implying a cost saving of US\$795.98 (2% less than the first option). **CONCLUSIONS:** From the perspective of the institution, it is important to review the treatment choices in order to achieve more efficiency in the resources use with the maximum effectiveness. The opportunity cost of the graft is high in the transplantation area.

### PUK3

#### EVALUATION OF COMPARATIVE COST ANALYSIS OF RENAL REPLACEMENT THERAPIES

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**OBJECTIVES:** The main objective of the study is to compare and analyze the costs of various renal replacement interventions (dialysis, and renal transplantation). **METHODS:** A cross-sectional observational study was conducted at KIMS Hospital, Hyderabad, India for a period of six months. All the renal replacement therapy patients willingness to participate in the study was included. The data collected were cost of dialysis, renal transplantation, medications, consultation fee, transportation cost. We analyzed the average monthly and annual cost of Renal Replacement Therapies (RRT). **RESULTS:** A total of 100 patients were enrolled during the study period. Out of 100 patients, 80 dialysis and 20 renal transplantation patients, majorities of them were in the age group of 41-60 year 66(66%) and men 63(63%) followed by women 37(37%). The cost for the dialysis for each time is Rs.1250. The average frequency of dialysis three times per week. The average monthly and annual cost of dialysis per patients was found to be Rs.15000 and Rs.1,80,000. The cost for the transplantation procedure was found to be Rs.1,40,000. The most commonly used Immunosuppressive agents were Tacrolimus, Mycophenolate Mofetil and Deflazacort. The average monthly costs of Immunosuppressive agents were Rs.8160-16000, Rs.2400-4800 and Rs.600-800 respectively. The average consultation fee for each time was found to be Rs.350. **CONCLUSIONS:** They are also several approaches to reduce the annual cost of renal replacement therapy (RRT). Obviously in long term, the most important factor is to reduce the number of patients with ESRD. This can be achieved by preventing the progression of renal disease. In India, the most frequent causes of ESRD are diabetes and hypertension. Early detection and treatment of these diseases play a vital role in the prevention of progression of renal failure and to postpone the need of RRT to an extent.

### PUK4

#### ASSESSING THE ECONOMIC BURDEN AND TREATMENT PATTERNS OF VETERAN CHRONIC KIDNEY DISEASE PATIENTS IN THE UNITED STATES

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**OBJECTIVES:** To examine the economic burden and treatment patterns of chronic kidney disease (CKD) in the U.S. veteran population. **METHODS:** A retrospective database analysis was performed using the Veterans Health Administration (VHA) Medical SAS Datasets from October 1, 2005 to May 31, 2012. Patients diagnosed with CKD were identified using International Classification of Disease 9<sup>th</sup> Revision Clinical Modification (ICD-9-CM) diagnosis codes 585.xx, 250.4xx, 791.0x, 583.xx, and 403.xx. Descriptive statistics were calculated as means  $\pm$  standard deviation (SD) and percentages to measure treatment patterns, costs and utilization distribution in the sample. Treatment patterns were examined 60 days after the identification date, and costs and utilization were examined for the 1-year follow-up period. **RESULTS:** The total number of U.S. veterans diagnosed with CKD in the VHA study population from 2005 to 2012 was 433,771. The top treatments for CKD patients were simvastatin (n=159,532, 36.78%), lisinopril (n=135,660, 31.27%), omeprazole (n=93,449, 21.54%) and furosemide (n=90,114, 20.77%). Other treatments included insulin, metoprolol tartrate, and amlodipine besylate, all of which showed less than 20% of patient use. The top two comorbidities for CKD patients were hypertension and diabetes. The percentage of patients with follow-up inpatient visits was 27.23%, which translated into \$11,927 in inpatient visit costs per patient. The percentage of patients with follow-up outpatient visits was 95.56%, incurring \$8614 in outpatient costs per patient. Patients with pharmacy visits (94.61%) incurred \$1869 in pharmacy costs. The average number of CKD patients with blood urea nitrogen test results was 349,750 (80.63%), and the test result mean was 27.01. The average number of CKD patients with creatinine estimated Glomerular Filtration Rate (eGFR) test results was 243,774 (56.20%) and the result mean was 50.67. **CONCLUSIONS:** Inpatient costs for CKD patients were responsible for more than half of the total costs. Laboratory test results should always be considered when interpreting drug effects.